UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/869,745	09/28/2001	Alan Wightman	DEXNON/095/PC/US	8639

2543 7590 08/26/2005

ALIX YALE & RISTAS LLP
750 MAIN STREET
SUITE 1400
HARTFORD, CT 06103

EXAMINER	
BOYD, JENNIFER A	

ART UNIT	PAPER NUMBER
1771	

DATE MAILED: 08/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/869,745
Filing Date: September 28, 2001
Appellant(s): WIGHTMAN ET AL.

James E. Piotrowski
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed June 13, 2005.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of invention contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The Appellant's statement of grounds of rejection to be reviewed on appeal is correct.

(7) Argument

Appellant's brief includes arguments as set froth in 37 CFR 41.37(c)(1) and (c)(vii).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

5705214	ITO ET AL.	01-1998
WO 95/10190	ROSE ET AL.	04-1995

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 112

Claims 22 – 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Appellant regards as the invention. The dependent claims 23 – 28, 30 – 33 and 35 - 36 are rejected as being dependent upon a rejected base claim.

Claims 22, 29 and 34 are indefinite because it is unclear what nonwoven webs would possess a lower cross direction wet expansion when compared to a similar web material comprising only the same cellulosic fibers because the Appellant has not set forth a comparative value in the claim. The Examiner is unable to determine the scope of the claim. For sake of examination at this time, the Examiner will assume that any nonwoven web material containing cellulosic and synthetic fibers will inherently meet the lower cross direction wet expansion requirement. If the property is not inherent, then it is asserted that the claim is missing an element critical to the invention, which would patentably distinguish it from the prior art.

Claim Rejections - 35 USC § 103

Claims 22 and 24 – 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rose (WO 95/10190) in view of Ito et al. (US 5,705,214).

Rose is directed to a porous bonded fibrous sheet material particularly suitable for conversion into food casings (Abstract).

Rose is directed to a porous bonded fibrous sheet material particularly suitable for conversion into food casings (Abstract).

As to claims 22 and 29, Rose teaches a porous substrate such as a paper comprising natural cellulosic fibers mixed with synthetic fibers (page 4, paragraph 3).

As to claim 24, Rose teaches that that paper is ideally prepared from long fibers such as abaca (page 4, paragraph 3).

As to claims 25 and 30, Rose teaches that cellulosic fibers are present in the porous substrate (page 4, paragraph 3). It should be noted that Rose does not specifically teach the use of wood pulp fibers as a cellulosic fiber in the substrate. However, the Appellant only requires that the wood pulp component is present in the amount of up to 50%, therefore, the presence of 0% wood pulp which is implied by Rose would meet the Appellant's limitations.

As to claims 28 and 31, Rose teaches that the porous substrate is wet laid (page 4, paragraph 3).

As to claim 32, Rose teaches that the porous substrate is treated with a coating composition which is an admixture of polymer latex and a wet strength resin (page 4, paragraph 4).

As to claim 33, Rose teaches that the porous substrate is treated with viscose during the final conversion of the precursor material to form the food casing (page 4, paragraph 33). It should be noted that it has been held that the recitation that an element is "adapted" to perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138.

As to claim 34, Rose teaches a porous substrate such as a paper comprising natural cellulosic fibers mixed with synthetic fibers (page 4, paragraph 3). Rose teaches that the porous substrate is treated with a coating composition which is an admixture of polymer latex and a wet strength resin (page 4, paragraph 4) and viscose during the final conversion of the precursor material to form the food casing (page 4, paragraph 33).

As to claim 35, Rose teaches that the porous substrate may be impregnated with the resin and viscose in one step (page 8, paragraph 2). Rose teaches that the substrate absorbs the viscose treatment during the final conversion of the precursor material to form the food casing (page 4, paragraph 33).

As to claim 36, Rose teaches that the porous substrate is dried using steam heated drying cylinders (page 7, paragraph 6).

As to claims 37 and 42, Rose teaches a porous substrate such as a paper comprising natural cellulosic fibers mixed with synthetic fibers (page 4, paragraph 3). Rose teaches that the porous substrate is treated with a coating composition which is an admixture of polymer latex and a wet strength resin (page 4, paragraph 4) and viscose during the final conversion of the precursor material to form the food casing (page 4, paragraph 33).

As to claim 38, Rose teaches that that paper is ideally prepared from long fibers such as abaca (page 4, paragraph 3).

As to claim 39, Rose teaches that cellulosic fibers are present in the porous substrate (page 4, paragraph 3). It should be noted that Rose does not specifically teach the use of wood pulp fibers as a cellulosic fiber in the substrate. However, the Appellant only requires that the

wood pulp component is present in the amount of up to 50%, therefore, the presence of 0% wood pulp which is implied by Rose would meet the Appellant's limitations.

As to claim 43, Rose teaches that the porous substrate is wet laid (page 4, paragraph 3).

As to claim 44, Rose teaches that the porous substrate is dried using steam heated drying cylinders (page 7, paragraph 6).

As to claims 22, 29, 34, 37 and 42, Rose teaches the claimed invention above, however, fails to teach that the synthetic fibers in the porous substrate are selected from polyester, polyester copolymer, polyamide, polyamide copolymer, polyolefin and polyolefin copolymer or a mixture thereof.

Ito et al. is directed to casings fabricated from a food component transfer sheet (Abstract). Ito teaches a base sheet made from a paper or nonwoven fabric comprising natural fibers and synthetic fibers such as polyester, nylon or other plastic fibers (column 3, lines 14 – 24).

It would have been obvious and necessary for one of ordinary skill in the art practicing the invention of Rose to provide the details of the synthetic fiber. As polyester and nylon (polyamide) are commonly employed synthetic fibers which provide reinforcement and heat stability to a casing material, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use polyester or nylon as the synthetic fiber as suggested by Ito in the invention of Rose, motivated by the expectation of successfully practicing the invention of Rose.

As to claims 22, 29 and 34, although Rose in view of Ito does not explicitly teach the claimed lower cross direction wet expansion compared to a similar web material comprising only the same cellulosic fibers, it is reasonable to presume that the lower cross direction wet expansion value is inherent to Rose. Support for said presumption is found in the use of like materials (i.e. a porous substrate made of a paper comprising cellulosic and synthetic fibers) which would result in the claimed property. The burden is upon the Appellant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed property of a lower cross direction wet expansion compared to a similar web material comprising only the same cellulosic fibers would obviously have been present once the Rose in view of Ito product is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977).

As to claims 26, 27, 40 and 41, Rose in view of Ito discloses the claimed invention except for that the porous substrate includes synthetic fibers in the amount of 0.5 to 20% by weight as required by claim 26 and the content of synthetic fibers in the porous substrate is from 3 to 9% by weight of the total weight as required by claim 27, the porous substrate includes synthetic fibers in the amount of 0.5 to 20% by weight as required by claim 40 and the content of synthetic fibers in the porous substrate is from 3 to 9% by weight of the total weight as required by claim 41. It should be noted that the amount of cellulosic and synthetic fibers in the substrate are result effective variables; for example, as the amount of cellulosic fibers increases, the substrate will become more paper-like. As the amount of synthetic fibers increases, the substrate will become more heat stable and strong. It would have been obvious to one having ordinary skill in the art at the time the invention was made to Rose in view of Ito, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*,

617 F.2d 272, 205 USPQ 215 (CCPA 1980). In the present invention, one would have been motivated to optimize the level of cellulosic and synthetic fibers to create a substrate with properly balanced elasticity, thermal stability and strength.

(11) Response to Argument

In response to Appellant's arguments that the language of "wherein the web material exhibits lower cross direction wet expansion than a similar web material comprising only the same cellulosic fibers" is not indefinite, the Examiner respectfully argues the contrary. In claims 22, 29 and 34, the Appellant only claims a nonwoven web comprising cellulosic fibers and synthetic fibers, but compares the cross direction wet expansion value to a web comprising only cellulosic fibers. The Examiner is unable to determine the scope of the claim. What exactly is the Appellant intending to claim: a nonwoven web comprising cellulosic fibers and synthetic fibers only or two nonwoven webs where one web contains synthetic fibers and one does not? The Examiner acknowledges the listed examples in Appellant's Specification where a web made according to the claims is compared to a similar web comprising only cellulosic fibers. The Appellant submits in all the examples the novel web material has a lower CD wet expansion than a conventional web comprising only the same cellulosic fibers. The Examiner submits that the prior meets all the physical and chemical characteristics of Appellant's claimed web, therefore, the lower CD wet expansion would be inherent. Additionally, the Office is not equipped to do physical testing of the products in the invention and of the prior art, therefore, it is highly suggested that the Appellant provide a quantitative amount for the cross direction wet expansion rather than comparing it qualitatively.

In response to Appellant's Argument that Rose does not anticipate or render the invention as obvious, the Examiner respectfully argues the contrary. Appellant argues that the Rose reference includes only three Examples, all of which teach 100% abaca fiber paper. As discussed in the rejection, Rose teaches a wet laid fibrous substrate comprising natural cellulosic fibers and, if desired, partially of synthetic fibers (page 4, paragraph 3). Although the examples may only discuss the use of 100% abaca fiber paper, the disclosed examples do not constitute a teaching away from a broader disclosure. *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971).

Appellant argues that Rose explicitly teaches that "the web's constituent fibers should also exhibit uniform formation and absorbency characteristics". The Examiner believes that such a requirement would not eliminate the incorporation of synthetic fibers. It should be noted that Rose positively recites that the incorporation of synthetic fibers are a suitable embodiment (page 4, paragraph 3). Additionally, Rose does not teach that a certain level of absorbency is required (i.e., higher absorbency level would imply a higher concentration of cellulosic fibers) only that the absorbency is relatively uniform throughout the substrate. Therefore, it is implied that the synthetic fibers can be utilized which have similar absorbency characteristics to the cellulosic fibers employed or that the individual component fibers (e.g., cellulosic fibers have uniform absorbency and the synthetic fibers separately have uniform absorbency) have uniform absorbency throughout the web.

As to Appellant's argument that Ito does not provide sufficient motivation to include the synthetic fibers of Ito in the web of Rose, the Examiner respectfully argues the contrary. Rose does not disclose the specific types of synthetic fibers that may be incorporated into the substrate, therefore, the Examiner used the teaching from Ito to incorporate synthetic fibers such

as polyamides or polyesters to increase the stability and strength of the substrate in food casing applications.

In response to Appellant's arguments that claims 25, 30 and 39 imply the presence of some amount of wood pulp, the Examiner respectfully argues the contrary. The claims require that the wood pulp fibers are present "in an amount of up to 50% by weight of the total weight of the cellulosic and synthetic fibers". It should be noted that no lower bound has been stated in the claim. Therefore, the phrase "of up to 50%" encompasses any value from 0% to 50%. If the Appellant incorporated a lower bound (e.g., 1 %), then the claim would positively recite that some level of wood pulp fibers greater than 0% must be present. The Examiner search notes submitted by the Appellant are not considered relevant in light of the limitations of the claim. It should be noted that the Examiner did not enter the Appellant's Rule 116 amendment in the amendment made after final on October 6, 2004 because it would require further and/or search.

In response to Appellant's arguments regarding the use of Boesch case law, the Examiner respectfully argues the contrary. As discussed in the rejection, Rose in view of Ito teaches a wet laid fibrous substrate comprising natural cellulosic fibers and, if desired, partially of synthetic fibers such as polyester, nylon or other plastic fibers. It should be noted that Rose does positively teach the use of synthetic fibers in the web. Appellant argues that there is no teaching or suggestion in Rose that the concentration of synthetic fibers directly affects the cross direction wet expansion. It should be noted that Appellant's claims do not suggest that the concentration of synthetic fibers directly affects the cross direction wet expansion. Claim 22 states that the cross direction wet expansion of the substrate of the invention is lower than a similar web comprising only the same celluosic fibers. It should be noted that claim 22 does not exclude the use of

impregnation of a liquid polymer dispersion to control the cross direction wet expansion. Rose in view of Ito fail to teach the amount of synthetic fibers present in the web. The Examiner has submitted would have been obvious to one of ordinary skill in the art to optimize the amount of synthetic fibers to create a stable web absent any evidence to the contrary.

In response to Appellant's arguments that the Examiner failed to consider all of the evidence submitted on October 4, 2004, the Examiner respectfully argues that the submitted evidence was irrelevant. As the Appellant discussed in the Arguments submitted on October 4, 2004, these page indicate that cellulosic fibers, such as the abaca fibers used in the Rose reference, have good absorbency. Synthetic fibers such as rayon also have high absorbency. Contrastingly, other synthetic fibers such as nylon, polyester, acrylic and olefin have low absorbency. Although the Examiner agrees with those statements, it does not preclude the use of synthetic fibers. Rose suggests that the incorporation of synthetic fibers are a suitable embodiment (page 4, paragraph 3). Additionally, Rose does not teach that a certain level of absorbency is required (i.e., higher absorbency level would imply a higher concentration of cellulosic fibers) only that the absorbency is relatively uniform throughout the substrate. Therefore, it is implied that the synthetic fibers can be utilized which have similar absorbency characteristics to the cellulosic fibers employed or that the individual component fibers (e.g., cellulosic fibers have uniform absorbency and the synthetic fibers separately have uniform absorbency) have uniform absorbency throughout the web.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Jennifer Boyd
August 12, 2005

Conferees
Terrel Morris – FM
Rena Dye – RD

TERREL MORRIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

ALIX YALE & RISTAS LLP
750 MAIN STREET
SUITE 1400
HARTFORD, CT 06103